

## For Health Hazard Applications

# Series 909RPDA

## Reduced Pressure Detector Assembly

Sizes: 2½", 3", 4", 6", 8", 10"  
(65, 80, 100, 150, 200, 250mm)

Series 909RPDA are designed exclusively for use in accordance with water utility authority containment requirements. It is mandatory to prevent the reverse flow of fire protection system substances, i.e., glycerin wetting agents, stagnant water and water of non-potable quality from being pumped or siphoned into the potable water line.

**BENEFITS:** Detects leaks . . . with emphasis on the cost of unaccountable water; incorporates a meter which allow the water utility to:

- Detect leaks that historically create great annual cost due to waste.
- It provides a detection point for unauthorized use. It can help locate illegal taps.

Modular check design concept facilitates maintenance and assembly access. All sizes are standardly equipped with AWWA epoxy coated, UL/FM listed OS&Y resilient seated gate valves, CFM (cubic feet per minute) or GPM (gallon per minute) meter and ball type test cocks. A pressure differential relief valve is located in a zone between the check valves.

### MODULAR DESIGN

Features a modular design concept which facilitates maintenance and assembly access. All sizes are standardly equipped with gate valves and ball type test cocks.

### FEATURES

- Body construction fused epoxy coated cast iron
- Replaceable bronze seats
- Maximum flow at low pressure drop
- Compact for economy combined with performance
- Design simplicity for easy maintenance
- Furnished with 5/8 x 3/4 (16 x 19mm) recordall meter Model 25, bronze
- NO SPECIAL TOOLS REQUIRED

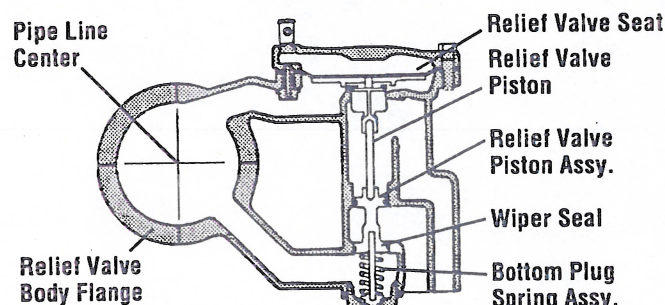
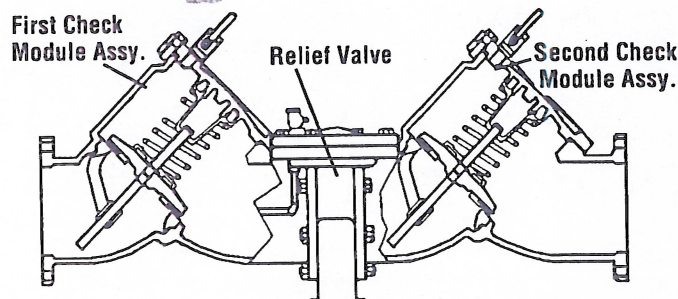
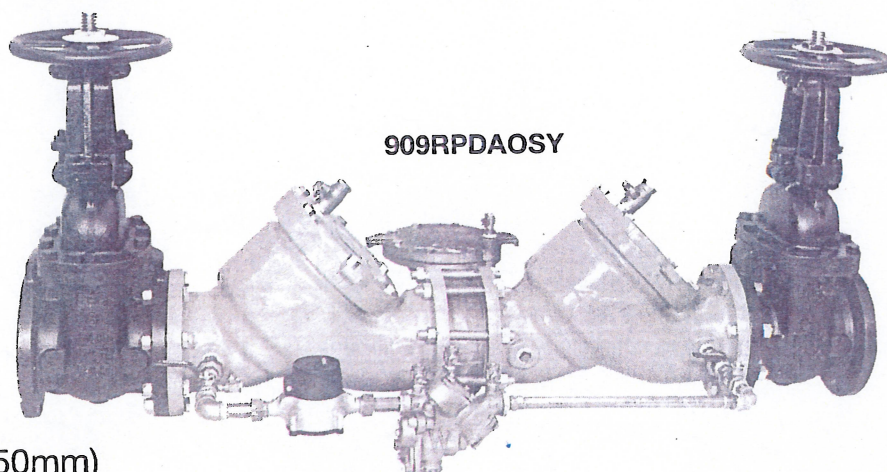
### AVAILABLE MODELS

#### Suffix:

- OSY - with outside stem & yoke resilient seated gate valves
- CFM - with cubic feet per minute meter
- GPM - with gallons per minute meter
- LF - less gate valves (4" - 10")(100-250mm)

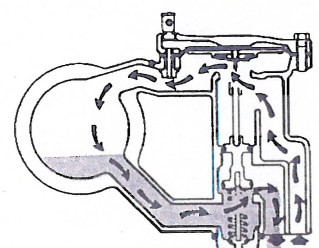
### SPECIFICATIONS

A Reduced Pressure Detector Check Valve/Backflow Preventer shall be installed on fire protection systems when connected to a public water supply. Degree of hazard present is determined by the local authority having jurisdiction. The unit shall be a complete assembly including UL listed OS&Y shutoff valves with FM approval. Including an auxiliary line consisting of an approved backflow preventer and water meter. The assembly shall meet the requirements of ASSE No. 1047; AWWA C511-92; UL Classified File No. EX3185; CSA B64 and USC Manual 8th. Edition. Watts Regulator Co. Series 909RPDA.



#### HOW IT OPERATES

The unique relief valve construction incorporates two channels: one for air, one for water. When the relief valve opens, as in the accompanying air-in/water-out diagram, the right-hand channel admits air to the top of the reduced pressure zone, relieving the zone vacuum. The channel on the left then drains the zone to atmosphere. Therefore, if both check valves foul, and simultaneous negative supply and positive back pressure develops, the relief valve uses the air-in/water-out principle to stop potential backflow.



Patent #4,241,752

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## MATERIALS

Size 2½" to 10" (65-250mm) have epoxy coated cast iron body, bronze seat and disc holder; stainless steel trim and durable, tight-seating rubber check valve discs.

All sizes furnished with bronze body ball valve test cocks. Furnished with outside stem and yoke (OS&Y) gate valves UL/FM listed. No. 909RPDA bypass line unit consists of an approved No. 909 reduced pressure backflow preventer assembly and CFM ⅝ x ¾ (16 x 19mm) water meter.

## STANDARDS

ASSE No. 1047; AWWA C511-92; CSA B64

UL Classified File No. EX3185; UL/FM

USC Manual for Cross-connection Control, 8th Edition

## APPROVALS

ASSE; UL/FM

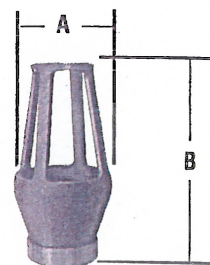
Approved by the foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

## PRESSURE - TEMPERATURE

Sizes 2½" through 10" (64-250mm) are suitable for supply pressures up to 175 psi (12.1 bars) and water temperatures to 140°F (60°C) maximum.

## Series 909AG AIR GAPS

When installing a drain line, use Series 909 air gaps on No. 909 backflow preventers.

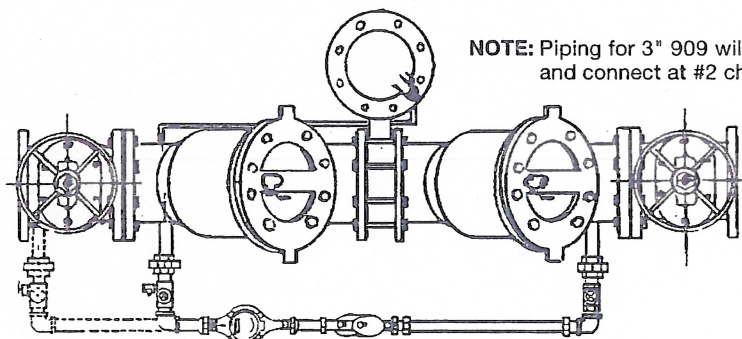


### Air Gap Dimensions

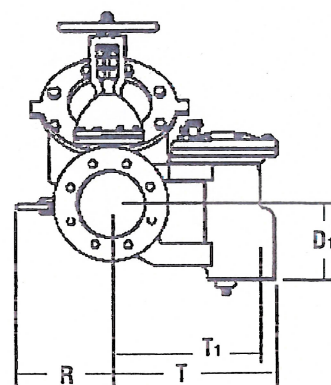
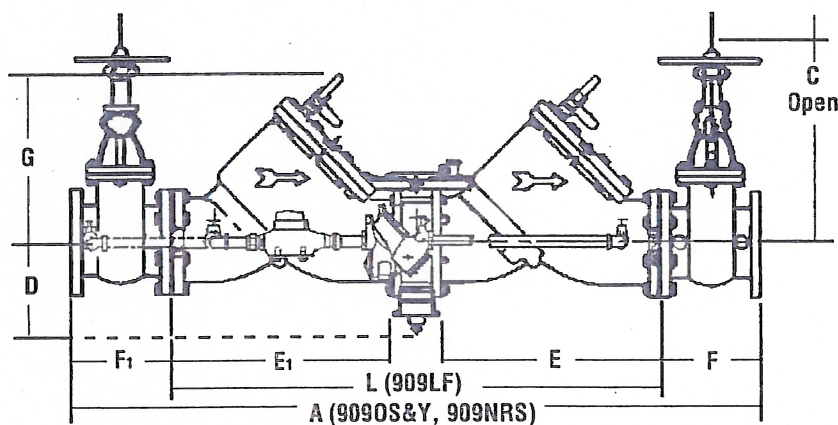
Iron Body No.	For No.		Drain Outlet		Dimensions				Weight	
	909 Sizes(Dn.)		Size		A		B			
	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
909AG-F	2½, 3	64, 76	2	51	4⅞	111	6¾	172	3.3	1.5
*909AG-K	-6	102-152	3	76	6⅝	160	9⅞	243	6.3	2.8
*909AG-M	8-10	203-254	4	102	7⅝	186	11¼	286	15.5	7.0

\*Epoxy coated

## DIMENSIONS - WEIGHTS



NOTE: Piping for 3" 909 will start from #1 gate valve and connect at #2 check valve.



Size (Dn)		Dimensions																				Weight			
		A		C		D		D <sub>1</sub>		E, E <sub>1</sub>		F, F <sub>1</sub>		G		L		R		T				T <sub>1</sub>	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
2½, 3	65,80	42⅞	1070	18½	470	5¼	133	4¼	114	12	305	8	203	7	178	26⅞	664	14	356	9	229	7⅝	194	230	104
4	100	55⅞	1400	23¾	603	6	152	5⅞	149	17	432	9	229	9½	241	37	940	15	381	13⅝	346	11¼	299	470	213
6	150	65½	1664	32½	826	6	152	6	152	20¾	527	10½	267	14½	368	44½	1130	16	406	13⅝	346	11¼	299	798	362
8	200	78¼	1988	39¾	997	9¾	248	8⅞	219	26	660	11½	292	18½	470	55¼	1403	17	432	18½	470	16⅞	416	1456	660
10	250	93⅝	2378	48	1219	9¾	248	8⅞	219	32	813	13	330	21½	546	67½	1715	18	457	18½	470	16⅞	416	2230	1012